Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (previously presented) An authentication method comprising the steps of:

    a. tagging an item by randomly distributing a taggant in at least part of the item, the taggant being invisible to an unaided human eye under normal conditions;

    b. optically detecting the random distribution of said taggant by:

        i. placing a detector in proximity to the item; and

        ii. generating data related to the taggant distribution coordinates; and

    c. verifying whether the data matches previous data from previously detected items.

2.   (original) A method as in claim 1 wherein the item is printed with a liquid, the liquid comprising printing ink and taggant.

3.   (original) A method as in claim 1 wherein the item includes a registration feature detectable by the detector.

4.   (original) A method as in claim 1 wherein the verifying step is invariant to the exact placement of the detector relative to the item.

5.   (original) A method as in claim 1 wherein the verifying step is tolerant to errors.

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6.　　(original)　A method as in claim 1 wherein the verifying step comprises storing at least part of the previous data from previously detected items in RAM.

7.　　(previously presented)　An authentication system for authenticating an item, the authentication system comprising:

　　　a. a fluorescent taggant invisible to the naked eye mixed with a material, at least a part of the item comprising the material;

　　　b. a detector capable of detecting location of the taggant without being required to contact the taggant;

　　　c. a database for storing taggant location coordinates from one or more items; and

　　　d. a verification unit for checking whether the item matches any of the one or more items in the database.

8.　　(previously presented)　An authentication method comprising the steps of:

　　　a. tagging an item by randomly distributing a taggant in at least part of the item;

　　　b. detecting the taggant by:

　　　　i. placing a detector in proximity to the item; and

　　　　ii. generating first data related to taggant distribution coordinates;

　　　c. marking the item with a code related to the first data; and

　　　d. verifying the item at a future time by:

　　　　i. placing a detector in proximity to the item;

　　　　ii. generating second data related to the taggant distribution; and

　　　　iii. comparing the second data to the marked code.

9.　　(previously presented)　A detector for detecting invisible taggant in an item, the detector comprising of:

a. an electronic camera capable of forming an image of a taggant distribution in the item;

b. means of making the taggant detectable to the camera; and

c. image processing means capable of:

i. detecting a registration mark on the item; and

ii. registering the taggant distribution to the registration mark.

10. (previously presented) The authentication system of claim 7 wherein said detector is capable of optically detecting the random distribution of said taggant in said item, and said verification unit is capable of checking whether said item matches any of one or more items in the database from said optical detection of said random distribution.

11. (previously presented) The authentication method of claim 8 wherein the generating of first and second data is achieved by optically detecting said random distribution of said taggant.

12. (previously presented) The authentication method of claim 1 comprising rendering the distribution of said taggant detectable by said detector by irradiating said item with radiation.

13. (previously presented) The authentication system of claim 7 comprising a radiation source for rendering said taggant detectable by said detector.

14. (previously presented) The authentication method of claim 8 comprising rendering said taggant detectable by said detector by irradiating said item with radiation.

15. (previously presented) The detector of claim 9 wherein said means of making the taggant detectable to said camera comprises a radiation source.